

Claims

1. A protein complex comprising a polyhedral protein having an insect virus encapsulated therein and a target protein having a restricted region of a capsid protein VP3 of cytoplasmic polyhedrosis virus as an embedding signal for polyhedron.

2. The protein complex according to Claim 1, wherein the restricted region of VP3 is either a region from the N-terminus to the 40th amino acid residue or a region from the 41st amino acid residue to the 79th amino acid residue.

3. The protein complex according to Claim 1, wherein the polyhedral protein has an effect on improvement in the stability of the target protein, protection thereof or improvement in the preservation property thereof, or a combination of any of these.

4. The protein complex according to Claim 1, wherein the target protein is at least one member selected from the group consisting of fluorescent or light-emitting proteins, enzymes, antigens, antibodies, cytokines, receptors and bioactive proteins.

5. A process for producing a protein complex, wherein a cell is infected with a vector that has been integrated with a gene encoding a target protein together with a vector that has been integrated with a gene encoding a polyhedral protein, and the

cell is cultured, whereby a protein complex having a complex structure composed of the target protein and the polyhedral protein is produced in the cell.

6. A biosensor characterized in that a protein complex according to any one of Claims 1 to 4 is arranged in dots or lines on a substrate and immobilized thereon.

7. A biosensor characterized in that a protein complex according to any one of Claims 1 to 4 is packed in such a manner that it can be contacted with a substance in a test solution in a recess formed on a substrate.

8. A biosensor characterized in that a protein complex according to any one of Claims 1 to 4 is packed in a container in such a manner that it can be contacted with a substance in a test solution.

9. An immobilized enzyme packed in a container, wherein the target protein of a protein complex according to any one of Claims 1 to 4 is an enzyme.